R. B. Powell

C. W. Campbell

R. B. Powell and C. W. Campbell Appointed Vice Presidents

R. B. Powell, Assistant Vice President, Administration, and C. W. Campbell, Director of Staff Services at Livermore Laboratory, have been promoted to Vice Presidents at Sandia Corporation, Albuquerque. The appointments are effective Aug. 1.

Mr. Powell became Assistant Vice President, Administration, this year after heading Sandia's Personnel and Public Relations organization since 1947, when the Laboratory was operated by the University of California. From 1943 to 1944 he was with Union Carbide Research Laboratories as Technical Assistant to Plant Superintendent. He was assigned to Los Alamos in 1944 by Union Carbide as Assistant Group Leader for Technical Services. In 1946 he was named administrative supervisor in the Chemistry and Metallurgy Division and later that year was appointed Personnel Director.

Mr. Powell is a member of the American Society of Engineering Education and Tau Beta Pi and serves on the Albuquerque YMCA Board of Directors. He is chairman of the educational committee of the Albuquerque Chamber of Commerce. He is a graduate of the University of Michigan where he received his B.S. degree in Mechanical Engineering in 1943.

C. W. Campbell, Director of Staff Services at Livermore since 1958, joined Sandia Laboratory in Albuquerque in 1947 when it was operated by the University of California.

He became Manager of the Administrative Department in 1948 and was promoted to Superintendent of Research and Development Staff Services in 1953.

Before joining Sandia he was an auditor for the Continental Casualty Company from 1931 to 1933 and served as auditor for the State of Illinois from 1933 to 1936. He was Chief, Accounting and Production Control, Social Security Board, from 1936 to 1940 and then became Chief Project Administrator for the U.S. Engineers in Bermuda. After Navy service he became Chief Auditor for the War Assets Administration in Chicago before joining Sandia.

Mr. Campbell is a graduate of Knox College where he received his BS degree in 1931.

Reporting to Mr. Powell will be the following Directors: C. H. DeSelm (4600), L. J. Heilman (4700), G. A. Parker, Jr. (4800), and S. P. Bliss (4900).

Reporting to Mr. Campbell will be R. G. Luckey (4100), R. J. Hansen (4200), K. S. Spoon (4300), T. T. Robertson (4400) and R. E. Hopper (4500).

Sandia Corporation Signs Agreement With Two Bargaining Units

Sandia Corporation signed agreements this week with the Metal Trades Council and Office Employes International Union covering working conditions for the next two years. The agreements terminate July 5, 1961.

The new agreements provide for wage increases ranging from 6 to 11 cents per hour in the Council and $2.40 to $4.40 per week in the Union. Increases for apprentices range from 6 to 8 cents.

Included in the agreements is a provision whereby an employee who is absent sick more than 14 calendar days will have restored 25 per cent to 75 per cent (depending on length of service) of the sick leave used beyond the 14th day of his sickness.

Also provided for is an opener in 1960 on wages and the amount of the Corporation's payment on the employee's premium under the Health Care Plan.

Copies of the new agreement will be available shortly.

Older Employees Asked to Submit Proof of Age

Sandia employees, 55 years or older, have been asked recently to provide proof of age to the Benefits and Services Division 4622. The policy of establishing proof of age 10 years prior to normal retirement age has been requested by the Prudential Insurance Co. to insure that proper credentials can be obtained before the employee retires.

Under the conditions of Sandia's retirement plan with the Prudential Insurance Co., proof of age must be established. This can be a difficult and time-consuming task. For those employees who do not have a birth certificate, 4622 personnel will assist with gatherable to the Prudential and the Social Security Administration.

Employees who already have birth certificates are urged to carefully preserve the documents.

SANDIA LAB NEWS

published every other friday for the employees of sandia corporation, contractor to the atomic energy commission

VOL. 11, NO. 14 ALBUQUERQUE, NEW MEXICO JULY 10, 1959

SANDIA HIGH ALTITUDE research rockets stand poised to roar into fireballs of ORANGE and TEAK shots. The large two-stage rockets carried instruments for making measurements of nuclear radiation, blast, thermal radiation and electro magnetic effects. The high altitude weapon effects studies were part of the Hardtack I operation conducted last summer in the Pacific at Johnston Island.

Two More Programs Scheduled for Sandia Colloquium Series

"Optical Measurements on TEAK Shot" will be discussed at a meeting of the Sandia Research Colloquium Wednesday, July 15. Joseph M. Proud, Jr. of the Nuclear Burst Experiments Division will be the speaker. Tickets will be required.

On Wednesday, July 22, William C. Sullivan, FBI Inspector, will discuss "Communism and Espionage in the United States." Attendance will be limited to the Colloquium access list.

Both meetings will begin at 9:30 a.m. in the basement conference room of Bldg. 802.

Sandia Helps Stage Tests

TEAK, ORANGE High Altitude Tests Make History

Almost a year ago on tiny Johnston Island in the Pacific, Sandians made history as part of Joint Task Force 7 that conducted America's first high altitude megaton-size nuclear weapons effects tests.

Unclassified results of the tests were made public for the first time recently by the Atomic Energy Commission. Sandia Corporation personnel played a major role in the high altitude tests from the early conception and planning stages to the final reduction of data.

Two megaton devices were carriesd aloft by missiles and detonated. The first shot, named TEAK, was detonated July 31, 1958, at an altitude in excess of 200,000 ft. The second shot, named ORANGE, was detonated at an altitude of about 100,000 ft. on August 11. The shots were part of the "Operation Hardtack" series.

Into the fireball of both shots roared a series of Sandia-developed research rockets gathering measurements of nuclear radiation, blast, thermal radiation, and electro-magnetic effects. Two types of rockets were used—large 16″ diameter heavily-instrumented two stage rockets and smaller, about 4″ in diameter, chaff and transmitting rockets.

Measure Blasts

From the Sandia-developed instrumentation carried on the rockets and the telemetry system developed by Sandia came the measurements of the blasts. Sandia-manned microbarograph stations and Sandia optical measuring equipment provided additional coverage.

Another group of Sandians provided, prepared and armed the firing system of both nuclear devices in cooperation with other DOD and AEC agencies. R. L. Eno (5232) was project officer. Assisting were J. M. DeMontmollin (1262) and G. W. Mead (1283).

According to the AEC release, TEAK and ORANGE were by far the most spectacular shots ever fired by the United States. TEAK produced a bright fireball which grew rapidly and immediately started to rise at a rate of approximately ½ to one mile per second. It reached a diameter of about 11 miles in 0.3 seconds and better than 18 miles in 3.5 seconds.

An aurora developed from the bottom of the fireball and spread rapidly to the north, and glowed brightly for about five minutes.

The fireball of the ORANGE shot developed much more slowly, and the aurora, somewhat less pronounced than TEAK, did not appear until the fireball had risen.

The auroral displays were caused by electrons produced by or arising from the nuclear detonations. The particles were trapped along the magnetic field lines of the earth to produce the described effects. Gas molecules in the earth's upper atmosphere were brought to luminosity by the electrons to produce the various colors observed.

Photographic Coverage

Providing photographic coverage for both shots was a Sandia group headed by D. L. Fastle (5216). Others were B. R. Anderson (8123), V. E. Baker (5216), W. G. Foy (5216), J. L. Hainds (5216) and M. A. Palmer (5216). H. G. Sweeney (5216) was project officer for documentary coverage for the Hardtack I operation.

One of the objectives of the Johnston Island tests was to determine the effect of high altitude nuclear detonations on radio and radar transmissions caused by reflection and absorption of the electromagnetic waves and disturbances of the ionosphere.

Heading the Sandia group in charge of these RF attenuation studies was J. L. Dossey (1262). Serving with him were R. B. Allison (5143), B. L. Barth (5143), C. T. Force (5141), E. D. Machin (5143), and W. J. Rogers (5232).

This group used a total of 16 rockets for both shots to gather data. All of the instrumentation used in the data gathering system was designed and developed by Sandia.

In charge of the transducers development group for Sandia was J. A. Beyeler (5221). This was the vital instrumentation carried by rockets that recorded burst data and converted it into electronic impulses for telemetering. Working on the project were Frank Biggs (5113), H. M. Dumas (5221), C. R. Mehl (5111) and D. K. Overmier (5221).

Data was telemetered from the research rockets as well as from the missile and the nuclear device. Sandia designed and operated the tracking system used to indicate position of all airborne carriers.

The data revealed that the electronic interference caused by TEAK and ORANGE resulted from modifications of the ionosphere. Ionizing radiation from the detonations so disturbed the earth's upper atmosphere that some radio waves were absorbed or scattered.

Communication Blackout

High-frequency communication blackout occurred to some, but not

(Continued on Page 8)

Tribute to Donald Aubrey Quarles

We of Sandia, who knew and worked with Mr. Quarles while he was president of the Corporation from March 1, 1952, to September 1, 1953, pay tribute to his wisdom and leadership which proved so valuable to Sandia and later to our nation as he undertook larger and larger responsibilities in its service. His broad experience in modern technology, coupled with his deeply inquiring mind and his ability for penetrating analysis, led him to establish wise policies for both Sandia Corporation and the Department of Defense, policies which have stood well the test of time. With his deep sense of duty, he labored selflessly to find balance in his considerations, exercising a moderate approach which was more effective because of reason and integrity.

We have lost also a warm friend and associate, who in the midst of his many responsibilities could always find time for our individual problems. We recall with pleasure his fine sense of humor and subtle Arkansan wit which were revealed especially during those few moments of relaxation he allowed himself midst his almost continuous working hours.

While we grieve the loss of this truly great public servant, we are grateful to have had the opportunity to know and work with Don. His influence on our everyday efforts will long be recognized.

Adopted unanimously by the Board of Directors of Sandia Corporation
June 9, 1959

'The American . . . Has A Weak Loyalty'

Currently on the booklet racks is a pamphlet, "Communist Indoctrination — Its Significance to Americans," by Major William E. Mayer. Major Mayer is a neuro-psychiatrist with the U. S. Army. The pamphlet relates the facts concerning the Communist "brain-washing" methods used on prisoners during the Korean conflict.

From this pamphlet we learned that there was no torture used by the Communists on the American prisoners. We learned instead that the prisoners were treated as well as possible by their captors. We learned that the "brain-washing" technique was one of "education."

Why was this education approach successful? It was stated in the pamphlet as quoted from a Chinese Intelligence report:

"Based upon our observation of American soldiers and their officers captured . . . the following facts are evident:

"The American soldier has weak loyalty to his family, his community, his country, his religion and to his fellow soldier . . . There is little knowledge even among U. S. university graduates (about) American political history and philosophy, the federal, state and community organizations, states and civil rights, freedom, safeguards, checks and balances and how these things allegedly operate within his own system . . ."

The Communists then proceded to present valid-sounding arguments against democracy and free enterprise and in favor of communism. Our soldiers had no logical, factual defense against these arguments. They had only emotional defenses which were strong enough to prevent most of our boys from truly renouncing their American heritage, but were not strong enough to prevent them from accepting, at least on the surface, many of the Communist tenets.

The real lesson to be learned from this pamphlet is not how the Communists treated our soldiers in Korean POW camps, nor is it how our soldiers succumbed to the Communist techniques. The real lesson is contained in the forequoted Chinese intelligence report — **We, Americans, do not know what we believe in.**

We accept our way of life, our freedoms, our rights and our heritage. But we don't really know what these are. Nor do we recognize or accept our duties to perpetuate this heritage that we love but do not understand.

One thing is truly self-evident. Each of us has a desperate obligation to develop our knowledge concerning our nation, for it is only through our ignorance that Communists can hope to conquer our country.

How can we develop this knowledge? Only through a continuous and self-asserting effort. We can daily follow news developments through our newspapers, TV and radio reports. We can regularly read one or more national news magazines. We can read a few books on our history and government* And we can discuss our government in conversations with our family and friends.

These may sound easy and perhaps pointless. But these actions are not easy, they require a concerted effort. And they are not pointless, they are vital. Before we can stop the spread of Communism, before we can constructively criticize our statesmen and our foreign policy, and before we can justifiably be and call ourselves Americans — we must know **what** our nation is, what it stands for, and how it operates.

*Available in the Sandia Corporation Library are **Democracy vs. Communism** by Colegrove, and **Principles and Functions of Government in the United States** by Godshall.

Five Sandia Employees On Church Board

Several Sandians were among those attending an organizational meeting at Retreat House at Pecos recently to promote the practice of making weekend retreats among laymen of the Archdiocese of Santa Fe.

Out of the 15 members of the Board of Directors, five are Sandians. They are: Jess Rehberg (5223), Ted Stetz (1626), Ernest Lovato (2231), Ed Fisher (5213), Barney Myer (4541).

New Band for Club Dance

The informal dance tomorrow night at the Coronado Club will feature the orchestra of Al Hamilton, according to J. N. Hansen (4411-4). Previously Paul Muench was scheduled to play but will be unable to keep the engagement.

Joleen Koger (2551)

Take a Memo, Please

A worried worker is unable to give his concentrated attention to work. In acute cases even his muscular coordination may be impaired. Keep your worries within limits.

Help Wanted

Two girls are needed to work during the noon hour at the cafeteria in Bldg. 839. No experience is needed but a "Q" security clearance is required. In addition to an hour's pay a free lunch is furnished. For further information contact O. J. Foster (4622) at ext. 29157.

Toes Saved

Chalk up another victory for safety shoes. Howard Zimmerman (2722) was using his power mower recently. He turned the motor off but didn't wait for the blades to stop turning before moving his foot next to the mower. Torn leather showed what could have happened to Howard's toes.

INCREASED SECURITY AWARENESS is emphasized by these coffee coasters being distributed to Corporation employees by Security Operations and Information Division. Suzanne Shelden (4722-2) says they really accomplish their purpose.

C. E. "Ernie" Sanchez
"—the important thing is to learn to paint well—"

Ernie Sanchez Showing Paintings During July at Sandia Base Library

A dozen paintings of C. E. "Ernie" Sanchez (4411-5) are on exhibit through July in the Sandia Base Library.

A self-taught artist who has been painting "ever since he can remember," Ernie's current exhibit represents the major part of his work for the past two years. He takes a realistic approach in his paintings and the Southwest is a predominant theme.

"Most of the paintings on display in the library," Ernie says, "are experimental. I'm searching for a style in my work and I'm trying various mediums."

Among the group of paintings are pen and ink drawings, watercolors and oils. He has several innovations in his work and achieves interesting results using a frame of varnished choya cactus with rawhide lashed to the frame.

Ernie prefers to paint people. Several portraits are among the collection and only one landscape is included.

He has been employed at Sandia almost six years as a draftsman. He pursues his hobby of painting evenings and weekends and he's serious about it. Although he has had no formal training in art, Ernie collects art textbooks and studies whenever he has an opportunity.

The current display is his second "one man show." During his stay in Japan while serving in the Army, Ernie held an exhibit in Osaka. He has sold several of his works.

"But selling my paintings is not the goal I have in mind," he says. "To me it is much more important to learn to paint well."

Welcome Back

Division 2722 is glad to welcome Jerry F. Dusek back at work after his lengthy illness.

New Homes

Al Bustamante (5141) and his wife have moved into a new home at 2819 Dakota NE.

T. F. Marshall (1265-1) recently moved into his new home at 206AB Meadowlark Lane in Corrales.

In California Shirley (8233-2) and Jack D. Foster (8153-2) recently purchased a new home at 42 May Court, Danville.

Another Sandian with a new home address is Stewart Bliss (2542), now at 2825 Cardenas NE.

Weddings and Engagements

The engagement and approaching marriage of Velma Lou Brown and James E. Van Meter was announced recently.

The wedding has been set for Aug. 2 at the home of the bride's parents in Belen, N. Mex.

"Lou" (4613 assigned to 2561) has been employed by Sandia for three years and Jim (5131) has been with the Corporation for the past year.

Miss Brown **Miss Thomsen**

The engagement of Sarah E. Thomsen (8232-1) to Gordon L. Griffith was announced recently by her mother. The young couple plan to be married next summer.

M. Celina Ortiz has set July 25 for her marriage to Leonard Lujan. The ceremony will be held in Alameda, N. M. After a honeymoon the couple will reside at 909 Eighth St. NW, Albuquerque.

Celina (4623) has been with the Corporation since last February.

Miss Ortiz **Miss Sternberg**

Lorna Sternberg will be married July 16 at the First Christian Church to Don Van Dongen of Albuqeurque.

Lorna (2221) has been with the Corporation since October 1955.

SANDIA LAB NEWS

The Sandia Lab News is an official publication of the Sandia Corporation, Albuquerque, N. M.
Office Bldg. 829, Public Relations Division
Editor: Robert S. Gillespie
Staff
Donald E. Graham, Cherry L. Burns, June Leonard
William A. Jenkins, Livermore Laboratory, Livermore, Calif.

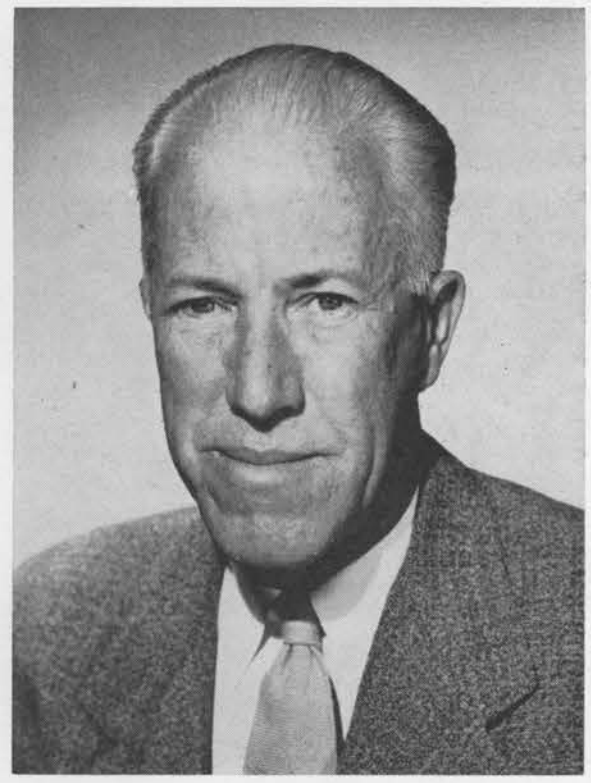
Telephone Sandia Base ALpine 6-4411 Ext. 25253, 26135

Deadline Friday noon of week prior to publication

Member Association of Nuclear Editors, Border Council of Industrial Editors, and affiliated with International Council of Industrial Editors.

RECOVERABLE NOSE CONE of Sandia's high altitude research rockets is shown in photograph above. The parachute mechanism floats nose cone to the ground and allows for recovery of delicate pay load of instruments and recorded data. The nose section is recoverable from land or water.

F. J. Given, Sandia Corp. V.P., Dies After Short Illness



F. J. Given

Frederick J. Given, Vice President, Administration, Sandia Corporation, died June 25 in an Albuquerque hospital after a short illness. Funeral services were held in the First Presbyterian Church June 27 and interment was in Fairview Cemetery, Albuquerque.

Mr. Given came to Sandia Corporation as Director of Apparatus Engineering from the Bell Telephone Laboratories in New York City. In 1956 he was appointed Vice President, Research and Development Technical Services and was named Vice President, Administration, in January of this year.

Mr. Given joined the Western Electric Company in 1919 and spent the next six years supervising a group of engineers developing coils and capacitors for telephone apparatus. From 1925 to 1952 Mr. Given held various supervisory positions with the Bell Telephone Laboratories and was Assistant Director of Apparatus Development at BTL prior to joining Sandia.

Active in professional fields, Mr. Given was a member of the American Institute of Electrical Engineers and the Institute of Radio Engineers. He served as Chairman of the U. S. Mica Mission to the United Kingdom in 1943 and was a consultant for the War Production Board from 1943 to 1945. He served as Chairman of the Panel on Components, Research and Development Board, DOD, 1947-1953, and was a member of the Advisory Group on Reliability of Electronic Equipment, DOD, 1951-1954. He was a licensed professional engineer in New York and New Mexico.

He was a member of the Masonic Order, Ophir Lodge, S. Orange, New Jersey, American Legion, Bell Telephone Post No. 497, New York City. He was a member of the First Presbyterian Church, Albuquerque.

A graduate of the Massachusetts Institute of Technology and Harvard University with Bachelor of Science degrees, Mr. Given was named "Mr. M.I.T. of New Mexico" in 1958. He was chairman of the MIT Regional Conference held here in February, exploring "The Role of the Southwest in Engineering."

Surviving are his wife, Mrs. Esther Madsen Given, 5009 Constitution NE, a daughter, Mrs. Alfred W. Gregory, 3612 California NE, a son, Donald F. Given, Minneapolis, Minnesota, and six grandchildren.

Mr. Molnar, commenting on Mr. Given's service to the Corporation, said:

"Mr. Given came to Sandia Corporation in 1952 after a distinguished career in science and engineering in Bell Telephone Laboratories. He brought to Sandia Corporation a background of broad experience in electronic technology which proved invaluable to an organization which at that time was in its early stages of development. Later, as Mr. Given was elected vice president of the Corporation, he assumed broad responsibilities in its over-all administration. His deep understanding of the problems of individuals and his kind and helpful manner in dealing with people made him a warm friend of everyone who knew him in the Corporation and in Albuquerque. Those who have known and worked with Fred Given will remember him always as a gentleman as well as a highly capable executive and engineer. The staff of the Corporation extends deepest sympathy to Mrs. Given and the family.

C. T. Force Writes of Sandia Work

Chaff Rockets Have Reached 400,000 Feet in Nevada Firings

Two types of Sandia rockets used for gathering data during the TEAK and ORANGE shots (mentioned elsewhere in this issue of the **Lab News**) are described in more detail in a document prepared for release recently by Charles T. Force (5141-1).

Mr. Force, project engineer for development of Sandia's chaff rockets, compiled the information for publication in "International Missile Guide" to be published by McGraw-Hill Book Company, Inc.

The 16" diameter rocket, called "Doorknob," was designed specifically for the ORANGE and TEAK operations. The system was designed for high ballistic accuracy in either a single or two-stage version.

The two-stage Doorknob rocket is capable of carrying 150 pounds of instrumentation to an altitude of 250,000 ft. when launched from sea level. It is 18½ ft. long and weighs 1,980 lbs. The nose cone is lowered back to earth by parachute and can be recovered from either land or water. Approximately 30 Doorknob rockets have been fired. Hermann A. Wente (5141) is project engineer for these rockets.

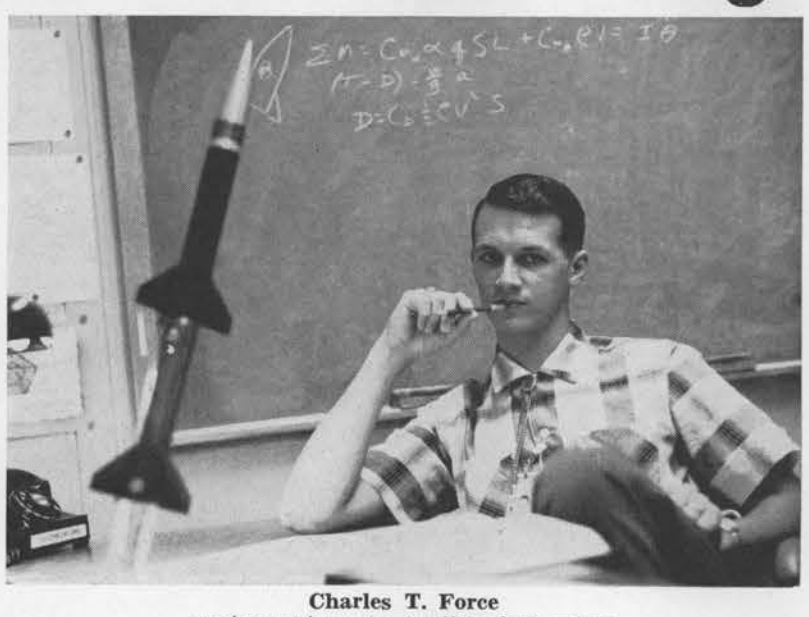
In addition to their role during the high altitude weapon effects tests, Sandia's chaff rockets have been used since January 1958 for research on upper atmosphere winds.

130 Chaff Firings

Since the start of the program more than 65 chaff rockets have been launched at Sandia's Tonopah Ballistic Test Range in Nevada. A total of 130 have been fired to date which includes the number used for the Pacific tests. The rockets have attained altitudes of from 200,000 to 400,000 ft. Rockets are launched at the rate of four a month to determine seasonal trends of upper atmosphere winds and four rockets are launched one day each month to establish daily trends. The tests have revealed that winds of more than 300 miles per hour have been found in the upper atmosphere at altitudes of between 200,000 and 300,000 ft.

L. B. Smith (5111) is directing the high altitude wind studies.

The chaff rocket is so named for its nose cone which contains millions of pieces of tiny aluminum strips. This chaff is released into the atmosphere at a specified altitude and tracked by ground radar stations. The chaff is carried by the high altitude winds and its speed and direction are recorded. The two-stage chaff rocket's payload weighs between 10 and 15 lbs. Weight of the rocket is 228 pounds and its length measures 17 ft.



Charles T. Force
—project engineer for Sandia's chaff rockets—

Others Described

Two other Sandia rockets are described in the document prepared by Mr. Force. The first is a Mach Five Test Vehicle used for high speed aerodynamic research. The rocket carries two nine-channel telemetering packages and is instrumented with ballistic, pressure, and temperature transducers.

In use, the second stage is boosted to an altitude of 53,000 ft. and is fired as it is free falling back to the ground. With this additional push it reaches the velocity of five times the speed of sound. Fifteen of these rockets have been successfuly fired at Tonopah.

The first stage of the Mach Five vehicle is a Nike Ajax booster. Second stage is designated XM-17 by its manufacturer, Thiokol Chemical Company. At launch the rocket weighs 2,250 lbs. and measures just over 22 ft.

Project engineer for the Mach Five vehicle is M. Dwayne Bennett (5141).

Parachute Test Vehicle

A supersonic parachute test vehicle is the last rocket described. Utilizing the same Nike Ajax booster as the Mach Five vehicle, the parachute test vehicle achieves a speed of Mach 2. Parachutes are released in an environment of dynamic pressures up to 4,000 lbs. per sq. ft.

Instrumentation includes rate gyros for measuring pitch, yaw and roll, accelerometers for measuring loads along the longitudinal and transverse axes, pressure transducers, and several sequence channels for determining chronological occurrence of events during test flights.

Two high speed 16 mm cameras are mounted on the fins to photograph the parachute deployment sequences.

The supersonic parachute test rocket has a diameter of 18 inches and weighs 2,400 lbs. at launch. It measures 22 ft. and 11 in. Project engineer for the rocket is Milton T. Kane (5141).

Apparent Low Bids Announced by AEC For Two Major Sandia Lab Buildings

Apparent low bidders for constructing two major buildings for Sandia Laboratory were announced last week by the Atomic Energy Commission.

Heading the list is a new shop Bldg. 841, to be utilized by Specialties Department of the Development Shops 4200. Apparent low bid was by the Robert E. McKee construction firm of Albuquerque. The firm bid was $977,700.

As previously reported in the **Lab News**, Bldg. 841 will house a foundry, sheet metal shop, welding shop, paint shop and plating facility. The new building will be located just east of Building 840.

Construction is to be completed within 300 days after the AEC issues notice to proceed.

Lemke Construction Company, Inc., of Albuquerque is apparent low bidder for construction of Bldg. 870, a new reclamation shop and warehouse. The bid was $261,000. Receiving and Reclamation Department 2240 will occupy the new building.

Construction is to be completed within 250 days after the AEC notifies the contractor to proceed.

Construction of an addition to Sandia's Complex Wave facility, Bldg. 6560, in Area III received an apparent low bid of $59,692 by Styron Construction Company of Albuquerque. The new addition will house a Random Wave Vibration facility and will be utilized by Test Laboratory Department 1610. Heart of the facility will be a "shaker" capable of supplying 25,000 lbs. of force and handling test units weighing up to 2,000 lbs.

The new vibration facility is to be completed within 150 days after the AEC issues the notice to proceed.

Frank A. Cronican, Albuquerque contractor, is apparent low bidder for construction of additions to Bldgs. 803 and 831. Both projects are part of the same contract. The bid was $53,756.

The Van de Graaff facility, Bldg. 803, will have a 1,340 sq. ft. addition utilized by the Physical Sciences Department 5150.

Industrial Hygiene Division 4961 and Materials Standards Department will use the 1,200 ft. addition to Bldg. 831, the Medical Department Headquarters.

Both projects are to be completed within 150 days after the AEC informs the contractor to proceed.

'Sandia Story' Gets Top Billing At Alameda (Calif.) County Fair

A top attraction at the Alameda County Fair this year is the Livermore Laboratory exhibit, a full-scale motion picture theatre featuring "The Sandia Story."

It is the first public showing of this 30-minute technicolor movie. The Fair which started June 29, ends Sunday, July 12. It is estimated that several thousand people, most of them residents of the Livermore Valley, will see the film.

The picture tells the story of a young engineer starting work at Sandia. It was chosen for the showing at the fair as an excellent means of acquainting local residents with the function and purpose of the Corporation.

The exhibit is called the "Thunderbird Theatre," taking its name from the similar theatre set up inside the Geodesic Dome on Sandia Base. It is located inside the commercial and industrial exhibit building on the fair grounds at Pleasanton, about six miles from Livermore.

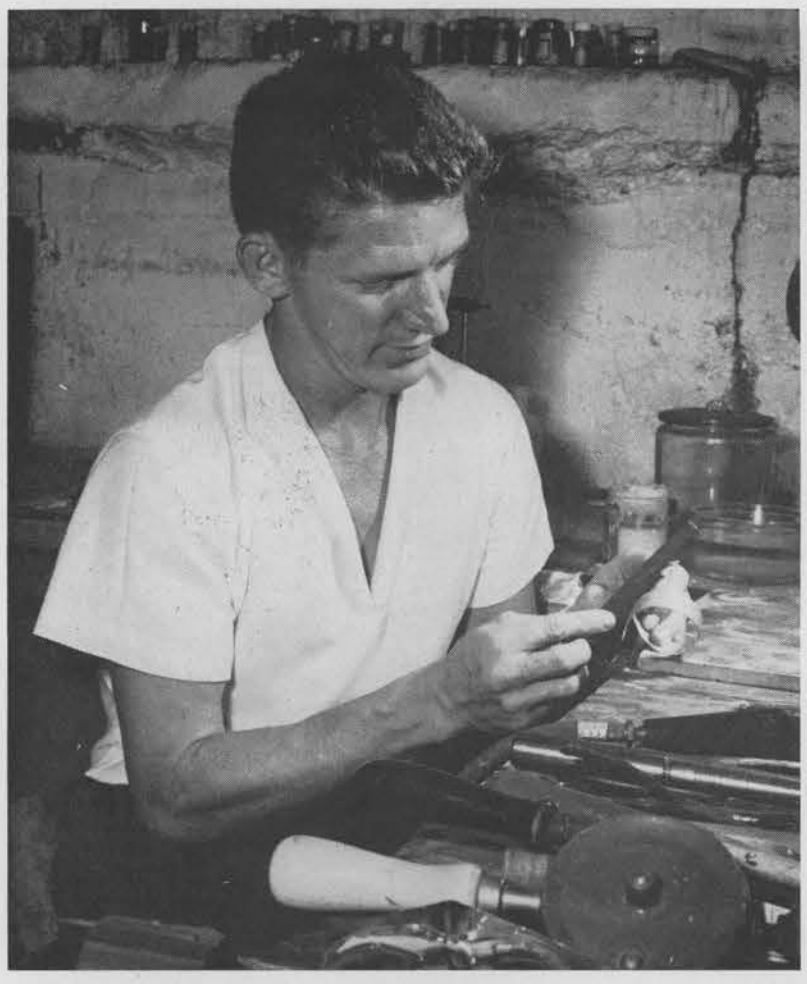
The 20-foot by 30-foot theatre will seat almost 60 viewers. It is completely fire-proofed and has its own cooling system. It is constructed of plywood panels covered with a simulated white brick. Woodwork around the sides and front is in turquoise and brown. Mounted on the sides of the theatre are blownup color photographs of scenes from the movie, interspersed with posters advertising the show.

In the front of the theatre, preview scenes, actually clipped from the movie, are shown continuously on a small screen under the marquee. A big billboard spells out the title of the picture in red, wooden letters on a yellow background. Below the billboard a bank of lighted cartoons depicts the development of a weapon from idea to stockpile. Take-home brochure telling "The Story of a Weapon," are available on a rack built into the front of the theatre.

The Publications and Public Relations Section (8233-1) was responsible for conceiving and coordinating the exhibit. The theatre was designed by Ubbie F. Hammer of the Technical Illustration Section (8114-5). Ramrodding the construction of the exhibit was Ralph Johnson, Plant Engineering Design Section (8221-2). He worked with George Mincks (8222), Maintenance Division supervisor, in arranging for the materials procurement, wiring, painting, carpentry, transportation and assembly of the display. The entire exhibit was checked out by Gil Rhodes (8214-4), Medical and Safety Section supervisor.

The theatre is manned by projectionist - staff representative teams. Staff representatives include Gordon Bjork (8213-1), Frank Cupps (8233-1), Bob Dewhurst (8233), Jack England (8233-1), Neil Givens (8233-1), Bill Jenkins (8233-1), Val Peterson (8213-2), Marlin Pound (8212-1), Ken Purchase (8213-2) and Jim Thorp (8212-1).

Projectionists are Bert Anderson, Gordon Bennett, Elliott Dopking, George Hosoda, George Saling, and Paul Van Dyke, all of the Photography Section 8124-2.



FILING SILVER bracelet, which he designed, is Bob Burgess who combines his own original ideas with skilled craftsmanship.

Many-Skilled Instrument Technician Finds Navajos Good Jewelry Buyers

Robert L. Burgess has versatile talents as a painter, sculptor and interior decorator, but his jewelry-making skill has even the Navajos wanting to barter for his silver and turquoise rings and bracelets.

At Sandia Bob is an instrument technician (5213-1). It's his after-work hours that are chock full of designing and craft work. "Sometimes I get so interested in painting a picture or making a piece of jewelry that I'll work through most of the night," he explained.

Bob has a basement workshop in which he has plenty of room for carrying on his various hobbies. Four of the six years Bob has been at Sandia he has taken evening courses at the University of New Mexico to learn such things as sand casting, overlays, inlays, setting and polishing of stones, and enameling. He spent six months studying silver soldering and allied crafts from a Navajo teacher.

He has won five first prizes for his jewelry at the New Mexico State Fair and other awards at the Albuquerque Art Show and International Folk Art Museum competition in Santa Fe.

"Right now my main interest," Bob said, "is in making mosaic pictures and lamps from bits of Venetian glass."

Department 5130 Picnic

Members of Department 5130 and their families enjoyed a very pleasant outing at Las Huertas picnic area in the Sandias recently. Highlights included a campout by three groups and a tremendous participation in badminton and volleyball games. Some of the youngsters were successful in catching horned toads.

Get Well Wishes

Get well wishes are extended to Lorenzo Duran (4221-2), who is in Veteran's Hospital.

STAFFERS at Livermore are given a briefing on procedures by W. A. Jenkins (8233-1), far left. (L to R): Gordon Bjork (8233-1), Ubbie F. Hammer (8114-5), who designed the theatre, Frank Cupps, Jack England and Neil Givens (all of 8233-1), Marlin Pound (8212-1), Val Peterson (8213-2), George Hosoda, Elliott Dopking and Gordon Bennett (all of 8124-2). Missing from the picture are Jim Thorp (8212-1), Bob Dewhurst (8233), Ken Purchase, George Saling and Paul Van Dyke.

Welcome—

Sandia Corporation Newcomers

June 22 - July 3

Albuquerque

Olinda L. Chavez 4623
Eileen R. Clark 4761
Mary Ellen Dixon 4623
Nancy J. Ellis, Jr. 2713
Franklin I. Gase 4254
Sharon D. Glenn 4623
*Charles H. Grissom 4764
Lois P. Hauser 2632
*Dorothalea M. Hinchey 4623
Max E. Holroyd 4132
Florencio G. Jaramillo 4574
Clarice E. Keiser 4752
M. Jan McRacken 2222
Florenio J. Mora 4574
Deanna G. Rawlinson 4211
E. Ann Ripperger 4623
Josie B. Sena 4623
Josephine V. Trujillo 4623
Frederica S. Vook 5126
Elmer J. Wendt 2552

California

Janice L. Meamber, Livermore 8212
Kathleen A. Brown, San Lorenzo 8212
Noel G. Eberz, Albany 8141
Orlando C. Moore, Oakland 8123
Ray W. Gillette, Hayward 8114
Richard W. Finn, Berkeley 8114
Peggy J. Flindt, Niles 8212
Vernon R. Ivins, Oakland 8225
Armond E. Conti, San Francisco 8153
Wayne W. Knutsen, San Francisco 8122
Darlene P. Cahill, Niles 8212
Reymon O. Rodriguez, San Francisco 8152
Franklin D. Bainter, Livermore 8232

Colorado

Marvin J. Becktell, Wheatridge 8153
Landis L. Parsons, Boulder 4330
Emmet M. Showalter, Boulder 2551
Carleton W. Sprague, Boulder 1232
Karl O. Waibel, Denver 4123

Connecticut

Gary A. Kinemond, Woodmont 1473

Idaho

Glen E. Brandvold, Moscow 8141
Darrell R. Christensen, Moscow 8152
Ivan S. French, Jr., Moscow 8123
Max V. Schell, Moscow 8162
William R. Wall, Moscow 8162

Illinois

Glenn E. Dietel, Chicago 8152
Crowell O. Dean, Decatur 4721
John D. Elson, Champaign 1450
Kenneth .D Granzow, Champaign 5150
Robert W. Lietzman, Chicago 1652

Indiana

William J. Zimmer, West Lafayette 1592

Iowa

James A. Fergesen, Coggon City 1432
Walter C. Wyant, Ames 1263

Kansas

Donald A. Butel, Topeka 1282

Maryland

John J. Cleary, Linthicum 8116

Massachusetts

Brooke H. Anderson, North Chelmsford 1625
Robert L. Heller, Boston 8211

Michigan

Robert D. Klett, East Lansing 1232
Clayton L. Mavis, East Lansing 1652
Wayne A. Sebrell, East Lansing 1282
Alfred L. Snow, Kalamazoo 1622

Missouri

John N. Baker, Columbia 5521
Richard R. Beasley, Columbia 1224
Charles W. Cook, Boonville 1611

Nebraska

Raymond L. Peabody, Hartington 1615

New Mexico

Paul D. O'Brien, Los Alamos 1626

New York

Roland E. Shaut, Cohotan 1451
Charles J. Still, Westfield 1652
David A. Willett, Lawton 5256

North Dakota

Duane R. Stenberg, Kindred 1222
Leslie E. Anderson, Fargo 1218

Ohio

Harold L. Davis, Columbus 5150
Richard A. Williams, Canton 1592
Alan L. Winkeljohn, Dayton 4422

Oregon

Raymond D. Culy, Klamath Falls 8122
Fred R. Dalrymple, Klamath Falls 8123
John E. Leeper, Klamath Falls 8121

South Dakota

Orton W. Benson, Jr., Vermillion 4152

Texas

Donald E. Benthusen, Fort Worth 8122

Washington

Henry S. Bjorklund, Pullman 8163
William S. Chalk, Seattle 8161
Ralph M. Morrison, Kirkland 8122
William R. Purcell, Pullman 8124
Edward O. Williams, Pullman 8124

Returned from Leave

Canuta C. Ortiz, Albuquerque 4423
Katheryn E. Lawson, Albuquerque 5150
Joellyn S. Vandock, Albuquerque 4741
M. Jeanne Brown, Albuquerque 4623

Temporary Summer Hires

Carol K. Benedict, Livermore, Cal. 8212
Robert W. Bray, Hayward, Cal. 8114
Jacqueline S. Biggs, Albuquerque 4333
William S. Dawson, San Leandro, Cal. 8114
John T. Doyen, Livermore, Cal. 8223
David R. Dickie, San Francisco, Cal. 8114
Pamela M. Dempsey, Albuquerque 4766
Denis C. Dickson, Albuquerque 4761
Nancy E. Dill, Albuquerque 4761
Charles A. Davis, Jr., East Lansing, Mich. 1611
Jacquelyn M. Greeno, Niles, Cal. 8221
Warren R. Hauff, Seattle, Wash. 8223
Robert A. Harger, East Lansing, Mich. 2723
Carl W. Hennrich, Charlottesville, Va. 5141
John W. Jellinghausen, Livermore, Cal. 8114
Sharon A. Kenney, Pleasanton, Cal. 8212
A. Russell Knudsen, Valparaiso, Ind. 1455
Paul F. Larned, Pleasanton, Cal. 8222
Sharon M. McNutt, San Francisco, Cal. 8212
M. Elizabeth McRae, Madison, N. J. 4766
James R. Melton, Albuquerque 4766
*Patricia T. Newman, Albuquerque .. 1452
Victor P. Remillard, Stockton, Cal. 8114
Theodore T. Reinke, San Francisco, Cal. 8114
J. Thomas Ratchford, Charlottesville, Va. 1626
Richard Y. Shimada, Hayward, Cal. 8114
*Dennis B. Sparger, Jr., Livermore, Cal. 8221
Marie A. Sannella, Albuquerque 4766
Ralph R. Spengeman, Albuquerque 4412
Barbara J. Smith, Albuquerque 4623
Dale K. Wallen, Livermore, Cal. 8222
John T. Wolowicz, Livermore, Cal. 8212
John H. Welsch, Princeton, N. J. 1592
M. Lucius Walker, Jr., Washington, D. C. 1455

* Denotes Rehired

AEC Receives Bids for Building Modification and Street Repairs

The Atomic Energy Commission announced recently the apparent low bidders for construction projects at Sandia Laboratory.

Lluts Construction Company, Pueblo, Colo., is apparent low bidder for construction of an addition to Bldg. 851. As previously reported in the **Lab News**, the 3,200 sq. ft. of new space will be utilized for Stock and Material Control Division 4212 for metal cutting operations and materials storage. Estimated completion date for the project is Nov. 1, 1959. The firm's bid was $39,463.

Apparent low bidder for construction in Area III is Styron Construction Company of Albuquerque. A Hot Gas facility will be built for use by Aerodynamic Research Division 5141 to test various aspects of rocket thrust and exhaust.

The contractor's bid was $86,376. Two reinforced concrete structures will be built—a control building, Bldg. 6720, and a rocket test cell, Bldg. 4721. Completion date for the project will be about Dec. 31, 1959.

Bldg. 849 Modification

Bradbury and Stamm Construction Company is the apparent low bidder for modification to Bldg. 849. The project consists of general interior modification and construction of a steel frame metal materials storage shed adjacent to the building. A new power substation is part of the contract. The bid was $89,958.

Bldg. 849 will house environmental test facilities of the Test Laboratory Department 1610 and Material Standards Development 1620. The project is to be completed within 200 days after the AEC gives notice to proceed.

With a bid of $76,033, C. R. Davis Contracting Company of Albuquerque is apparent low bidder for street and parking area improvements for Sandia Laboratory. The contract includes a two-mile gravel access road to Area III.

Patching Streets

The project consists of patching and sealing existing streets and parking lots, adding new precast parking barriers, concrete sidewalks and the Area III access road. Work is to be completed within 100 days after the contractor receives notice to proceed from the AEC.

Apparent low bidder for construction of Bldg. 9925 is Cillessen Brothers Contractors, Inc., of Albuquerque. The firm submitted a bid of $64,396 to construct a 2,900 sq. ft. Coyote Test Area field headquarters building. It will be utilized by Field Experiments Section 5112-2 for office space and lab facilities.

Estimated completion date of the project is Nov. 10, 1959.

STROMBERG FAMILY, loaded in their former school bus, is ready for a camping trip in the mountains. Six beds and sufficient storage area make the bus a good home away from home.

Moving Atomic Ordnance Course Presented by 2552

A course covering procedures of moving atomic ordnance was completed recently by a group of Sandia, AEC and military personnel. The course was presented and prepared by Manufacturing and Design Division B 2552.

Participating in the presentation were Dan Grim, C. B. Saunders, L. A. Faw, R. A. Kavet and R. C. Gauerke (all 2552). Frank Barnett (5323) and F. J. Weibell (1285) assisted in the presentation.

Plans for the future call for additional and longer courses to be presented.

SAO Receives Award For Safety Performance

Sandia Area Office was presented the Commendation of the Atomic Energy Commission for superior safety performance in operating 282,591 manhours without a disabling injury from January 1, 1956 to December 31, 1958.

General Manager A. R. Luedecke extended to Mr. Campbell and his employees the appreciation of the Commission and his personal congratulations for this fine record.

Traveling in Converted School Bus With Six Children Proves No Chore

When the six Stromberg children climb into the yellow school bus in front of their home they know that an outing is in store for them, not studying.

Robert P. Stromberg (1473) found the answer to transportation for family vacations when three years ago he purchased a used school bus. It took Bob and his wife two days to clean the interior of a three inch accumulation of dust. After being steam cleaned the engine started with a roar.

Next step was to unbolt and remove all except four of the double seats. In place of the removed seats Bob installed two pairs of bunk beds and two other twin-bed size mattresses which double as sofas. Storage space for food, lanterns, kindling wood, clothing, kitchen utensils and dishes is located beneath the mattresses. A butane heater keeps the bus warm.

"In three years we've covered 10,000 miles in the bus. My investment is probably around $600 plus about 50 hours of work," Bob explained.

The large vehicle cruises at about 45 mph and gas mileage is around 12 miles to a gallon.

Last summer the Strombergs and their children Mary 9, Mark 8, Tommy 6, John 5, Ann 3 and Peter 1, made a three week vacation trip to Minnesota. Mrs. Stromberg recalled, "Even with a large station wagon I'm sure we would have been nervous wrecks by the time we crossed the state line. With the school bus the children can play in the back end of the bus and we don't even hear them up front."

Sometimes they even use the bus for shopping trips around town: "It beats trying to line up a baby sitter," Bob said.

So far this summer the Strombergs have camped near San Gregorio Lake and an outing in the Jemez country is planned. If it rains a portable table can be fitted between the bunks when eating time rolls around.

"The children are very good about staying together when we are in the mountains," Bob said, "but as a safeguard we have given each child a whistle and instructions to sit down and blow it if they think they are lost."

Bob is the chauffeur but he intends to see that his wife has more practice in driving the bus. "Civil defense evacuation plans call for me to proceed east and my wife west. It would be a good idea for her to know how to drive the children to safety."

'Small World' Finds Sick Les Lamkin, Jr., Home in Ireland

It's a small world.

These are old words but they took on new meaning recently when a desperately ill boy in a foreign country found sympathetic friends who shared mutual acquaintances.

L. E. "Les" Lamkin, Jr., whose father is Director of Quality Assurance 5500, was enroute to Europe with a group of students when "seasickness" developed into appendicitis with complications. For five days he was in the infirmary taking antibiotics while the ship made full speed for the nearest port—Cobh, Ireland.

From Cobh Les was rushed to a hospital in Cork and underwent surgery.

When Les, Sr. heard the news, a father's anxiety searched for a way to help. He remembered that Nora O'Neill, 4000 secretary, was a native of Ireland and he called her to ask if she knew anyone in Cork.

Cork, it happens, is Nora's home town and she has a sister living there and a brother-in-law residing in another town closeby. Nora contacted her relatives and asked them to see if they could be of any help to young Les.

In the meantime, the operation was performed and Les was recovering.

The leader of the student tour, Keith Stumpff, University of New Mexico, paced the waiting room corridor during the operation and afterwards called Mr. Lamkin twice to report on progress. He remained with young Les until he was off the critical list.

The American Counsul in Cork, Richard W. White, visited Les every day and wrote to Mr. Lamkin giving details of his son's progress.

Nora's family in Cork visited often with the patient and wrote letters to Mr. Lamkin assuring him that his son was receiving the best in medical care and was recovering rapidly.

As the **Lab News** goes to press, Les, Jr. should be about to fly back home as his doctors have recommended. If it were up to him, he would stay a few weeks in Ireland and visit with his new friends.

"We're grateful," Mr. Lamkin said, "that our son's interests have been so well looked after. I am indebted to Nora's family, to Mr. Stumpff and the others who were so helpful. We are also very grateful to Mr. White, whose interest in our son reflected the excellence of our foreign service representatives. We will be glad to have Les home again, although I'm sure he will want to finish his tour of Europe next summer and visit again in Ireland."

Booklet Rack Offering Describes Breakdown of Korean War Prisoners

"Communist Indoctrination—Its Significance to Americans" is the report of an Army major on the behavior of Americans who were prisoners of the Chinese in the Korean War.

The booklet will be in the racks next week.

This shocking disclosure of the breakdown of United States soldiers' will to resist while in prison camp will open our eyes even more to the dangers we face in communism.

No job is so important and no service is so urgent that we cannot take time to perform our work safely.

Sandia Corporation Has Worked 26 Days Without a Disabling Injury

HERE'S WHY...

Our employees know an accident-prone person is a worker who over a long period of time, due to family troubles or worry, lacks that alertness on the job which is the essence of safety.

Supervisory Appointments

R. WARD HUNNICUTT to supervisor of Inspection and Fire Prevention Section 4542-1, Inspection, Administrative and Scheduling Division.

Ward has worked in the plant engineering organization during his nine years with Sandia Corporation as an engineer in architectural structure.

He is a graduate of North Carolina State with a BS degree in general engineering and is a registered professional engineer in New Mexico.

During World War II Ward served a short period in the Navy.

DELFRED M. OLSON to supervisor of Firing Set Development Division 1263, Electrical Systems Department.

During his six and a half years with Sandia Del has served as a section supervisor for the past four years. His work has been in warhead electric system design.

He came to the Corporation directly from the University of Washington where he obtained both his BS and MS degrees in electrical engineering. One summer Del worked for Boeing Aircraft in Seattle.

Del's membership in honorary societies includes Phi Beta Kappa, scholastic, Sigma Xi, scientific, and Tau Beta Pi, enigineering.

He served for two years in the Army.

FRED R. SWEET to supervisor of Metallurgy Section 1621-1, Inorganic Materials Division.

Fred has been at Sandia three years, first in 1200 and the past few months in 1621.

Previously he was 10 years with New Mexinco Institute of Mining and Technology both in Albuquerque and Socorro in metallurgy and administrative positions.

Fred also worked four years for Goodyear Aircraft at Litchfield Park, Ariz., as supervisor of their materials and process laboratory. For a shorter period he was a metallurgist with Inland Steel Co. in Chicago.

He holds a Master's degree in metallurgy from the University of Arizona and a Bachelor's degree in metallurgical engineering from Colorado School of Mines.

Fred is vice chairman of the Albuquerque chapter of the American Society for Metals and is a member of the American Institute of Mining and Metallurgical Engineers. He is a registered professional engineer in New Mexico and Arizona.

DEAN K. YEAROUT to supervisor of Section 1422-1, Radar Systems Development Division.

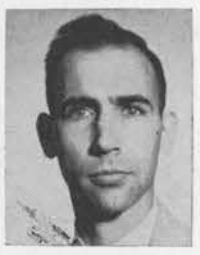
Dean came to Sandia nearly eight and a half years ago as an electronic technician and has been a staff member, technical, since 1953. Most of his work has been in radar design and development.

Previously he had received his BS degree in electrical engineering from the University of New Mexico. Before attending the university Dean had worked there for a year and a half as a calculator in the Physics Department.

He is a member of Sigma Tau, engineering honorary, and the Institute of Radio Engineers.

During World War II Dean served a year and a half in the Navy as an aviation radioman.

CHARLIE R. BLAINE to supervisor of Section 1423-1, Radar Advanced Development Division.



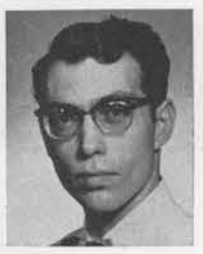
Charlie has worked in research and development during his three years with Sandia Corporation.

Prior to coming to Albuquerque he taught electrical engineering for two years at the University of Idaho while working on his Master's degree. Charlie also received his BS degree in electrical engineering from the University of Idaho.

He worked for one year as an engineer for General Electric in Schenectady, N. Y., and served 18 months in the Army.

Charlie is a member of Sigma Tau, engineering honorary, and is a registered professional engineer in New Mexico.

K. DAN HARDIN to supervisor of Section 1431-1, Electronic Devices Division.



Dan has worked in the 1400 organization as an engineer during his six years with Sandia Corporation.

He came to Sandia directly from the University of Oklahoma, where he received his BS degree in electrical engineering.

One summer Dan did transistor work at the Naval Research Laboratories in Washington, D.C.

He is a member of Tau Beta Pi, engineering honorary, Eta Kappa Nu, electrical engineering honorary, the Institute of Radio Engineers, and is a registered professional engineer in New Mexico.

I. NEAL HUMBLE to supervisor of Planning Section 4541-1, Plant Engineering Department.

Neal has been with Sandia since October 1950 and has been in charge of construction planning and budgeting in Plant Engineering.

Previously he worked a year as an architect in Albuquerque.

Neal attended Oklahoma State University for a year and a half, then transferred to Kansas State University where he received his BS degree in architecture. He is a member of Tau Sigma Delta, honorary architecture society.

During World War II Neal served four years in the Navy submarine service and during the Korean conflict he was recalled for 11 months duty.

Sandia Bowling Champions Emerge As Season Closes

PULLENPARDTENS is the top team in the Schternwerkes Coronado Club Thursday night league. Clockwise members are Sev rn Starzynski (1284), Ken Pilkington (4412), Tom Tisch (5143`, Ken Koerner (1284), Howard Jones (1224), Don Kvarnstrom (1284).

THE NAVAJOS came out on top of the Coronado Club Indian League. Members are (L to R) Frank Chaves (2721-2), Robert Lozano (2721-2), LeRoy Henderson (4511-1) and Richard Marmon (2721). Missing are Gino Giannini (2721), Jim Coughlin (5322).

TOP BOWLERS in the Coronado Club Jewelette League were members of the Jades. Admiring their trophies are (L to R) Barbara Donaldson (wife of G. H. Donaldson 1522), Koni Malenfant (4413-4), Marilyn DeBetty (4413-4) and Pat Horne (husband is George Horne, Jr. 4751). Team member not shown is Audrey Rouckus (4411).

SANDIA BASE MAJOR LEAGUE champions won over 12 other teams. The Merrill's Chevron team members are (L to R) Jim Hay (4253-2), Tony Repetti (1455), LeRoy Huenefeld (2562), and Bill Semka (4411-3). Standing in rear are Neith Pollard (1411) and Ed Willett (4321-1). Missing from the photo is team member Joe Paruta (4135).

ALL STATES LEAGUE champion is the Indiana team. From left are Ed Holderman (2544) seated, Rudolph Widman (4411), Jack Hansen (4411), Bob Fegan (AEC), Hersch Martin (AEC) and Dick Browne (5224). Other members not shown are George Wank (4412) and Lou Brewer (AEC). Indiana team defeated seven teams of league.

CHAMPIONS of the Sandia Lab Handicap League are members of the Roberson Builders team. They defeated 20 other teams. From left are Frank A. Ross (2551-2), Roy Ewing (4412), Ray Tillery (1217), Wally Hansen (4412-4) and Joffre Myers (1217). In the foreground is shown John Pupelis (4412-2), captain of the team.

CORONADO CLUB CHAMPIONS, The Lions of the Jungle League, went on to win bowling sweepstakes at the club. Standing (L to R) Bill King (5512), Roy Hansen (5531), Felix Almaraz (5513) and Donald Jones (5531). Seated Andy Ryan (5513), Ed McGarvie (5513) and Jim Porter (5512).

Meteorological Society Recognizes Work of Two Sandia Employees

American Meteorological Society has made announcements concerning two Sandians.

A technical paper by Jack Reed (5111) has been accepted for publication in the June issue of the Society's Bulletin. The article is entitled "A Note on Satellite Density Observations."

Also, the Society's executive committee has approved the certification of Mr. Reed and B. N. Charles (5121) as consulting meteorologists. Only five such certificates were approved this year throughout the country.

AEC to Remodel ALO Headquarters

Cillessen Brothers Contractors, Inc., of Albuquerque is apparent low bidder for miscellaneous modifications to the Atomic Energy Commission's Albuquerque Operations Office headquarters. The firm's bid was $16,512.

The project consists of the relocating of some existing partitions, and miscellaneous related mechanical and electrical revisions. The work is to be completed within 110 days after the contractor receives notice to proceed.

Driving Range on Base Being Made Available To Sandia Employees

Corporation golf addicts, living on Sandia Base, have been authorized use of the military golf driving range located east of the Sandia Officer's Club.

Sgt. C. R. Bracy, range manager, notes that the facility is open Monday, Wednesday, Thursday and Friday from 11 a.m. to sunset and Saturday, Sunday and holidays from 1 p.m. to sunset. The driving range is closed all day Tuesday.

Persons authorized to use the range may bring guests.

Sandia Service Awards

Ten Year Pins

Henry S. Lanier
4211
July 1, 1949

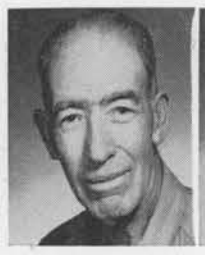
Paul R. Littell
5257
July 7, 1949

William C. Austin
4741
July 11, 1949

Joseph Hernandez
4764
July 11, 1949

Henry M. Willis, Jr.
4741
July 11, 1949

Lloyd C. Brewster
8122
July 12, 1949



Amado Romero, Sr.
4254
July 13, 1949

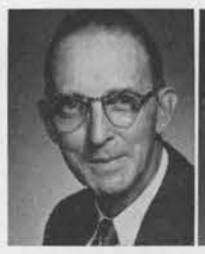
Deaudin P. Griego
2227
July 14, 1949

Cayce Lawrence
5531
July 14, 1949

David C. Hake
4512
July 18, 1949

June J. Moore
4700
July 18, 1949

Clyde D. Babcock
4563
July 19, 1949



Mabie L. Shoemaker
2552
July 19, 1949

Jean M. Gillette
4623
July 20, 1949

Andrew B. Moulder
1422
July 21, 1949

A. Marie Thompson
4762
July 22, 1949

Five Year Pins

July 11-24

Henry C. Black 1452, Dale F. Walters 4751, Milton J. Lew 4254, Charlotte M. Morter 4431, W. C. Huffman, Jr. 4842, Richard W. Hill 4253, Carl L. Frostenson 2533.

Jasper Hadady 4252, Mae K. McGoorty 4623, Zelma E. Beisinger 5126, Ethel M. Canady 2231, A. J. Brouillard 1265, Bill H. Moss 4842, Stanley D. Spray 1224.

William J. Costales 4252, Michael P. Ryanczak 4511, R. H. Richardson 4411, C. S. Williams, Jr. 1454, E. Alice Preist 4423, Eliseo L. Chavez 1462, Harry A. Martin 4518.

SHOPPING CENTER

CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday.

RULES

1. **Limit: 20 words**
2. **One ad per issue per person**
3. **Must be submitted in writing**
4. **Use home telephone numbers**
5. **For Sandia Corporation and AEC employees only**
6. **No commercial ads, please**
7. **Include name and organization.**

FOR SALE

'48 STUDEBAKER Champion, w/overdrive and heater, runs good. Bentz, AX 9-2961.

'47 CESSNA 140; complete electric system w/starter, Narco Superhomer; well-equipped panel w/altimeter, let's hear offers. Seligman, CH 2-0263.

3 BRM HOME, colorock, sunken living room, walled back yard, in Princess Jeanne Park, Total price, $9,500. Heimer, AX 9-4501.

THOMAS ELECTRONIC organ, $550 cash or take over payments. Johnson, AX 9-6912.

'57 THUNDERBIRD, one car owner, actual low mileage, lots of extras. Romero, DI 4-0302.

LAWN MOWER, reel type, Sears Best, $125 value, $45. Parker, AX 9-1485.

BREAKFAST TABLE and chairs, seats 8, formica top, $40. Johnson, AX 9-6912.

TABLE LAMPS, 3, ceramic $10. Miller, AX 9-1904.

'51 FORD V-8, 4-door, 33,000 miles, automatic transmission, radio, $350; Amana freezer, 15 ft. upright, 1½ years old. Alesch, AX 9-5682.

STEEL GUITAR, triple neck, magnastone, case, legs, amplifier 12" speaker, P.A. system, $275; three genuine Navajo rugs, $40. Hinds, AL 5-7671 after 4:30.

BABY PLAYPEN, collapsible, $6. Webb, AL 6-6626.

RECORD PLAYER, RCA portable, automatic, $18. Haley, DI 4-3919.

3 BRM HOME, 1¾ baths, family room, see-thru fireplace, carpeted, drapes, landscaped, disposal, perimeter heat, air conditioned. Sivinski, AX 9-6014.

'59 BUICK, La Sabre, 2 door hardtop, power steering, wsw, wonderbar radio, heater, total $3400. Roane, AX 9-1761.

DOUBLE BED spring, fairly new. Trujillo, CH 7-1187.

3 BRM HOME, Princess Jeanne, newly decorated, carpeting, drapes, walled, 4½% G.I., $61 monthly, FHA appraisal, $10,500, no closing cost. Monette, AX 9-3517.

'52 PONTIAC, 2-door, R&H, hydramatic, $250. Hare, AX 9-3535.

HOUSEHOLD FURNISHINGS, complete bedroom suite, dining room, 3-piece sectional, tea cart, grand piano, beach umbrella, others. Conner, CH 2-1289.

TWO RUGS, 9'x12', brown tweed, cotton and viscose, $45 each, only 4-months old. Shroka, Ext. 23280.

'58 CHEVROLET, 4-door, V8 hardtop, powerglide, Bel-Air, 17,000 miles, $2195, consider older American or foreign car in trade. Larsen, AX 9-3496.

ELECTRIC STOVE, Frigidaire, 40 inch, $125; office settee and 2 matching chairs, $40, exhaust window fan, $15. Zack, AX 9-1831.

3 BRM HOME, Hoffman Royal Brick, 1¾ baths, sprinklers, carpet, drapes, dishwasher, disposal, screened patio, near schools, bus. Bundberg, AX 9-2177.

EVAPORATIVE COOLER, 4500 CFM, used one season, $75 or highest offer; Play Gym, $13. Mondress, AX 9-0245 after 5:30.

TOY POODLE puppies, two silver, available July 17. Judd, AX 9-6536 .

PICKET FENCING, 2 50 ft. rolls, new wire bound, 36" high, has never been unrolled, $20. McClure, AX 9-9405, 2012 Glorietta NE.

MASSIVE 8 ft. sofa, brown nylon upholstering, $70, misc. end tables, AKC registered Bassett Hound. Strome, AM 8-2689, 1409 Georgia NE.

BUNK BEDS, 1 pair blond maple, 1 chest of drawers, 1 door 2 ft. 6 in. by 6 ft. 6 in., all for $50. Hilderbrand, AM 8-0392.

DOBERMAN PINSCHER puppies, 8 weeks old, AKC registered, reasonably priced, terms available. Chandler, AL 5-2652.

ELECTRIC RANGE, 36" Kenmore, push-button controls, automatic oven, $110; contemporary white oak twin beds, no bedding, $10 each. Norvill ,AL 5-1725.

USED 4 LITE glazed garage steel casement, $3; used 2'6" exterior door, painted, $5. Dlouhy, AL 6-7952.

INFANT SEAT, $5; playpen, 29-48, can be rolled from room to room, $10. Johnson, AL 5-5427.

ALFALFA, bale, $.90. Padilla. AX 9-4043, 8830 N .4th.

BLACK PIPE, approximately 75 feet, ¾ inch, used 3 months, complete w/ connections, 10 cents per foot. Lathrop, CH 7-3882 after 5:30.

SUPREME REST mattress and box spring, $60; Firm-O-Pedic mattress and box springs, $60, or $100 for both. Green, AL 6-7507 after 4:30.

CARTOP CARRIER, large, heavy-duty, plywood construction, $20. Webb, AL 6-6626.

HANDMOWER, 18" Craftsman, ball bearing w/grass catcher, used 2 seasons, recently sharpened, $15. Stevens, AX 9-6086.

2 BRM HOME, den, walled yard, newly decorated, stove, frigidaire, washing machine, new FHA loan and $2900 cash. Astin, AL 6-3355, 3930 Simms SE.

BABY STROLLER, w/canopy and basket, $10. Martinez, AX 9-1918, 9537 Claremont NE.

NEXT

DEADLINE

FOR SHOPPING CENTER ADS

Friday Noon, July 17

TRANSMITTERS, Harvey Wells TBS-50, Bandmaster VFO, and AC power supply, $95; 10 watt 10 meter mobile transmitter w/all equipment, $55. Bauer, AL 5-7774.

3 BRM HOME, Inez addition, brick, 1¾ baths, corner lot, w-w carpeting, drapes, sprinklers, air conditioned, many extras, $17,900. McCullar, AX 9-0638, 7603 Prospect NE.

3 BRM HOME, den, 1½ baths, w/w carpeting, walled, landscaped yard w/sprinklers, air conditioning, Hoffmantown. Henderson, AX 9-3758.

COLLINS 75A-1 receiver, factory rebuilt VFO, $250; Heathkit Audio Generator, AG-9A, $25. Greene, AX 9-8747.

'55 STUDEBAKER, President, h. t. cpe, new tires, brakes, power steering, power seats, tinted glass, R&H, etc. 32,000 miles, one owner, $1195. Davis, AL 6-4962.

BEDROOM SUITE, 2-piece, walnut, blond desk, $40; blond bookcase, $40; Colliers Encyclopedias, $80. Wood, Ext. 45165.

BEDROOM SET, 3 piece, $85; coffee table, $10; living room set, 2 piece ,$75; '49 Ford, 2-door, $150 or $125. Monget, CH 2-4934.

LIMED OAK CRIB, $10; innersprng mattress and coil spring, twin bed size, $12.50. VanDelinder, AL 5-9324.

'46 FORD, new paint, 15 inch wheels, $200. Milton, 318 Tennessee NE.

STEEL CASEMENT WINDOW, complete w/screens, style 3423, $20; clothesline poles, T-type, $6 pair. Olson, AL 5-8360.

AUTOMATIC WASHER, Maytag, 1955 model, $50 or best offer. Lobato, 2129 Alvarado NE, AM 8-8294.

ROLLER SKATES, ladies rink type, w/-Harlick white boots, size 7½, almost new, $10 or best offer. Garcia, AL 6-7606.

GARAGE DOOR, aluminum, full size, overhead, complete w/fixtures, $25. Young, AX 9-1627 after 5 p.m.

BEDROOM SUITE, 4-drawer chest, night stand and lamp, double bed, box spring and mattress, ideal for child's room. Verardo, AL 5-6385.

SIAMESE KITTENS, Champion stock, 6 weeks old, Beaube, AX 9-5064 after 5.

ELECTRIC RANGE, Estate, top grill, deep well, oven window, bar-b-cue feature in oven, $150. Gross, AL 5-7327.

FOUR TIRES 6:40x15, white wall, $28; '48 Mercury rebuilt engine, balanced by Powell, $175. 1947 Dodge complete, $100. Villella, AX 9-7915.

'53 PONTIAC "6", 4-door, R&H, it shure do drive nice, any reasonable offer considered. Blaine, AX 9-1036.

'50 JEEP, 4-wheel drive, metal cab, new motor, $850. Winblad, DI 4-3109.

3 BRM HOME, centrally located, large lot, assume 4½% GI, $2500 down, possible second mortgage, $15,000. Palmer, AL 5-3915.

'50 DODGE, ½ ton pickup, 2-tone paint, dual spare mounts, R&H, 3-speed transmission, $325. Fay, CH 3-6244.

'53 FORD, 2-door sedan, $300; aluminum rack mount chassis w/electronic components, 10c per pound. Roberts, AX 9-0877.

TENNIS RACKET, Wright-Ditson, Youngstar (Junior size), tight, $3.45. Fesler, 8902 Phoenix NE, AX 9-1020.

ROLLAWAY BED, ¾ size (48"), innerspring mattress and coil springs, $35. Bowers, AL 6-5226 after 5 p.m.

CUSHMAN SCOOTER (Eagle), white, 1958, accessories, priced for quick sale. Burley, Ext. 43293.

'49 STUDEBAKER, Starlight coupe, Commander six, economical, low mileage, one owner, overdrive, R&H, test drive, $200. Brion, Ext. 41283, 3100 37th Place, Sandia Base.

4 BRM HOME, Hoffman Brick, 1¾ baths, garage, disposal, air-conditioned, walled, 4% GI loan transferred, must sell. Lundham, AX 9-6856, 9019 Los Arboles NE.

'54 FORD Victoria, HT Fordomatic, power steering, R&H, one owner, $875 cash or trade for older car. Davis, AX 9-1331, 2617 Garcia NE.

BUNK BEDS, $60; bedroom suite, $55; desk and stool, $10. Dillon, AX 9-7730, 1716 Maxine NE.

'47 MOTORCYCLE or trade for shotgun, 2 wheel trailer, $40. Patterson, AX 9-6590.

4 BRM HOME, Roberson, screen porch, w/w carpeting, double garage, fireplace, 4½% GI, $88 per month. Robinson, AX 9-0971, 9706 Euclid NE.

GARRARD MODEL RC-80 record changer and GE Cartridge, $28; apt. size gas stove, $15; encyclopedia set, $35. Moore, AX 9-2781.

EASY SPIN DRY washer, $25. Svensson, DI 4-7700.

ALUMINUM COVER, custom made, for Ford wide bed pickup, roll out windows, locking tail gate, $160. Skelton, AX 9-3190.

ROTARY MOWER, $15; electric lawn edger, $12.50. Merrell, AX 9-0348, 2712 Gen. Chenault NE.

SEWING MACHINE, portable electric, Singer, w/zig-zag blind-stitcher and button holer, $30. Tilley, AX 9-2762.

HOTPOINT RANGE, nearly new, clean. Hoglund, AL 6-9452.

MATERNITY CLOTHES, sizes 14-16, both summer and winter. Reimholz, AX 9-5107.

2 BRM HOME, modern adobe, 6 acres, fenced in cool Monzano Mts., 30 minutes from Sandia Base, $12,000 w/$3800 down. Treon, AL 6-1418 after 5 p.m.

'58 CUSHMAN Eagle, w/special green reflectorized paint job, extras, $350 cash or best offer. Sandine, DI 4-5359 after 5.

2 BRM HOME, car-port, large lot, lawn, fence, fruit trees, rear patio, NE to G.I. or refinance, F.H.A. committment. Foster, 3115 Erbee NE, AX 9-0444.

'55 BEL AIR, Chevrolet V-8, Powerglide, R&H, best offer over $1145, just the car for vacation. Creveling, CH 2-3790.

TWO PIECE living room set w/coffee table, $35. Moorhead, CH 2-2546.

AIR CONDITIONER, 3000 CFM window or roof type, $49.50. Kutzley, AL 5-3572.

THREE PIECE living room set, $75; high chair, $15; bassinet w/mattress, $8; bathinet, $15; strollers, $8 and $6. Gonzales, CH 2-4934.

WANTED

WILL TAKE CARE of two children in my home, ages 2-5. Mueller, AX 9-1079, 2728 Vermont NE.

HOMES FOR KITTENS, half siamese, free. Morrow, AL 5-4532.

CHILD CARE in my home, meals included; will do ironing in my home. Carlson, AM 8-8138.

OLD FORD or Mercury 1941 to 1948 needing engine work. Villella, AX 9-7915.

UPRIGHT FREEZER, 12 cu. ft. or less, late model. Hartley, Ext. 31270.

CAMERA, 6x9 cm. or 2¼"x3¼", double extension bellows, f 4.5 lens, ground glass focusing, must be in fair condition. Dlohy, AL 6-7952.

CHILD CARE in my home, age 1½ to 3 years, weekdays. Gentry, 1020 Quincy SE, AL 6-2478.

TO TRADE new Westinghouse portable radio for 35mm camera or car cooler. Parker, AX 9-1485.

HOMES FOR KITTENS, 4 red, 3 black, your choice, free. Osterby, AX 9-4606.

FOR RENT

3 BRM HOUSE, 5 miles north of Base; available July 22, $105 month; water, garbage paid. Teta, AX 9-6155.

LOST AND FOUND

LOST—Roll chain necklace w/anchor and heart, card case w/ID of Walter Joseph, 2 keys on chain w/Oden tag. LOST AND FOUND, Ext. 26149.

FOUND—Oval cuff link w/Egyptian head, Green Sheaffer's pencil found in Lobby Bldg. 840; key found in men's locker room Bldg. 840. LOST AND FOUND, Ext. 26149.

LIVERMORE FOR SALE

3 BRM HOME, 2 baths, fenced yard, landscaped, patio, 2-car garage, converted studio, approx. $16,000, assume FHA loan. Ullman, HI 7-2254 after 6.

ELECTRIC RANGE, Kelvinator 30-inch, $100; dinette set, grey, $40; '59 Fiat, 8000 miles, consider Volkeswagen in trade. Grape, HI 7-3017.

14 FOOT BOAT, 12 hp Sea King outboard, trailer; 1949 Chevrolet pickup w/hitch, all for $1185. Smith, HI 7-1299.

LIVING ROOM set, green, $45; reclining chair, ottoman, green, $20; dinette set, $15; dining room set, buffet, china closet, $100. Murar, VE 7-6633.

Bertha R. Allen Accepts Award from National Libraries Association

The Rio Grande Chapter of Special Libraries Association was presented two awards at the 50th Anniversary Convention held at Atlantic City, N. J., recently.

Bertha R. Allen (4721-1), president of the chapter, accepted the awards on behalf of the members.

The gavel award is given to the member chapter having the greatest percentage increase in membership. The H. W. Wilson Award for recruitment activity in the special libraries field is a money award of $100 and was shared with the Southern California Chapter.

The Rio Grande Chapter was organized three years ago and remains the newest in the nation.

Congratulations

Born to:

Mr. and Mrs. D. T. Judd (1611-2) a daughter, Lorrie Ellen, on June 18.

Mr. and Mrs. Jack LaBrier (4573) a son, Robert Thomas, on May 28.

Mr. and Mrs. John J. Weimer (4766-2) a son, John Howard, on June 5.

Mr. and Mrs. Richard Vigil (4231) a son, Michael Anthony, on June 12.

Mr. and Mrs. Charles Force (5141) a son, Gregory Kent, on June 25.

Mr. and Mrs. John P. Logan (4751) a son, Patrick Stewart, on June 26.

Mr. and Mrs. Jay D. Gilson (8153-2) a daughter, Leigh Ann, on June 5.

Mr. and Mrs. Elfego G. Sanchez (2243)3) a daughter, Donna Karen, on June 12.

Mr. and Mrs. Elmer R. Pitts (4251-1) a son, Bartley Wade, on June 12.

Mr. and Mrs. Dan Lanza (1245-1) a son, Stephen Thomas, on June 28.

Sympathy

To L. M. Berry (1621) for the death of his wife in Albuquerque on June 29.

To Marie Thompson (4762-3) for the death of her grand-daughter on June 23.

To Ann Ercole (5121) for the death of her mother in Oklahoma City on June 21.

To Estella Baca (2241) for the death of her brother in Belen on June 22.

To Bernard Stiefeld (2542) for the death of his father in New York on June 29.

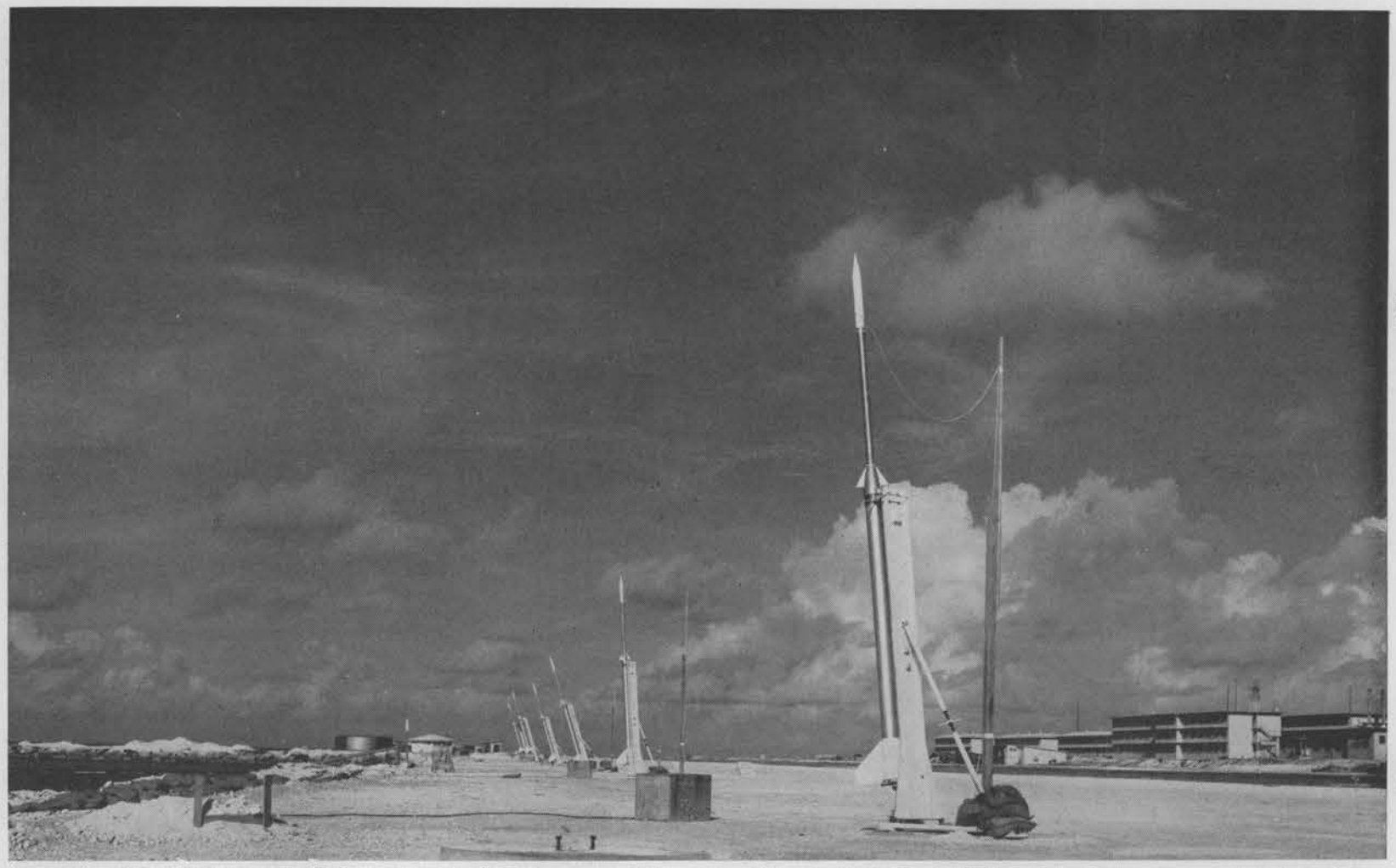
To George Dupre (4224-2) for the death of his mother in Pawtuckett, R.I., on June 26.

To Richard L. Durham (8231-1) for the death of his mother in Portland, Ore., on June 24.

To Peggy Zumwalt (8233-1) for the death of her mother in Fresno, Calif., on June 24.

To N. R. Anderson (1611-1) for the death of his father on June 27 in Iola, Kansas.

To Jack M. Lohse (5131) for the death of his father on June 28 at Glen Ridge, N.J.



SMALL TWO STAGE ROCKETS developed by Sandia were used for RF attenuation studies of ORANGE and TEAK shots. Some of these rockets carried chaff ejecting heads for high altitude wind measuring. The chaff, lightweight strips of aluminum, was ejected by the rockets and tracked by radar to make the measurements. About 65 of these rockets were fired during the Hardtack I operations.

Continued from Page One . . .

History-Making ORANGE, TEAK Shots

all channels within the affected region. Operations working similar frequencies through the same areas experienced markedly different degrees of blackout. Some communications channels were operable at all times. Absorption on the order of minutes occurred near the shot at even ultra-high frequencies.

Project officer for the RF telemetering system was C. G. Scott (5232). In the group that developed the telemetry and tracking systems and operated it during the tests were M. G. Baker (5142), M. E. Barnett (5256), F. B. Brumley (5232), T. V. Crawley, Jr. (5221), J. W. Garriott (5232), R. E. Glass (5223), T. F. Laney (5241), J. A. Maxim (5232), C. J. Reed (5223), V. W. Hansen (5221), A. F. Huters (5214), R. L. Hostetler (5232), W. E. Jungmeyer (5126), R. J. Rudolph (5232), C. H. Senter (1456), and T. M. Schultheis (5222).

Another group of Sandians headed by D. E. Henry (5223) operated the Sandia rockets to capture radio chemical samples after the burst and to measure wind velocities at burst altitudes.

A total of 25 rockets were used for the two shots to gather this information. Nineteen of the rockets carried chaff-ejecting heads. The chaff, lightweight strips of aluminum, were tracked by radar to make the measurements.

Participating in this group were L. E. Baker (1232), J. R. Banister (5150), J. T. Campbell (5223), H. W. Pumphrey (5143), L. B. Smith (5111) and W. E. Walker (5143).

Larger Rocket Group

Development group and operating personnel for the larger Sandia rockets were T. P. Krein (1231), project officer, V. G. Redmond (1285), original project officer, J. R. Biesterveld (1246), J. W. Gumm (8162), C. A. Loveless (8153), W. C. Monday (1471), E. W. Upchurch (4221), H. R. Vaughn (5141), C. O. Weaver (1474), H. A. Wente (5141) and B. S. Snow (5232).

Surface overpressure measurements were made by Sandia-manned microbarograph stations located on Johnston Island, French Frigate Shoals, and in Hawaii. R. A. Jeffrey (5254) was project officer. In the group were H. E. Bell (5231), H. H. Morrison (1625), and J. W. Reed (5111) was scientific advisor for the project.

Operational supporting personnel performed the important tasks of report preparation, personnel recordkeeping, transportation of equipment, preparation of installations, and hundreds of other jobs that helped assure the success of the operation.

More Personnel

R. E. Dunlap (4723) was report coordinator for the planning phase of the operation, G. R. Miller (5111) was report editor. Other support personnel were C. C. Tolbert (5142), N. T. Barnes (4732), E. M. Beezley (4732), J. F. Branson (4732), W. E. Cordek (5232), H. R. MacDougall (5232), D. W. Russell (2251), E. N. Villella (2251) and P. E. Pettigrew (2232).

Commander of Task Group 7.1 (the scientific task group) for the Hardtack I series was Don B. Shuster (5200). Heading the Sandia task unit for Hardtack I participation was C. E. McCampbell (5232). Morgan Kramm (5232) was Sandia program director for the ORANGE and TEAK shots. Scientific advisor for this portion of the operation was T. B. Cook, Jr. (5110).

M. L. Merritt (5130) was scientific advisor for the overall Sandia participation in the Hardtack I operation.

Participation in the Hardtack operation was Corporation-wide, Mr. Shuster emphasized. The personnel mentioned in this article participated overseas in the operation. Hundreds of other Sandians from virtually all areas of the Corporation who did not travel to the Pacific contributed much, he said. The operation could not have succeeded without their contributions.

PRE-LAUNCHING CHECK is given one of Sandia's Chaff rockets used in attenuation studies of ORANGE and TEAK shots. Performing the circuit check are R. B. Allison (5143), on top, W. E. Walker (5143), next on ladder, and C. T. Force (5141), right. Hermann Wente (5141) is almost hidden by the rocket launcher base.

Mountain Club Does Good Deed to Rectify Bad Deeds of Other Campers

A number of Corporation employees joined a New Mexico Mountain Club hike on a recent week-end that combined pleasure with good deeds. The destination was the beautiful Lake Catherine at the foot of Santa Fe Baldy in the Pecos Wilderness area.

Purpose of the mountain trip was to clean up debris left by former careless campers.

Included in the clean-up brigade, which packed in six miles to the lake, were Irving Auerbach (5150), trip leader, Hank Tendall (1215), club president, Zelma Beisinger (5126), Tom Oakes (5232) and Dick Martindell (1522).

Although the group was faced with adverse weather, literally thousands of cans and bottles were removed from the area, normally one of the most scenic spots in the state. According to the trip leader similar conditions exist at many other camping spots in the state.

Club President Tendall had these suggestions to offer to campers: "If possible, carry out all trash, such as bottles and cans, which cannot be burned. If this is impossible the cans should be burned in a fire and then buried. This will prevent wildlife from digging them up and will also cause the tins to oxidize faster thus hastening decomposition. All other refuse should be burned. The fire, of course, should be carefully extinguished."

Mountaineers Undertake Rock Climb July 12

A practice rock climb and a hike in the Pecos wilderness low country are on the New Mexico Mountain Club itinerary for the next two weekends.

On Sunday, July 12, technical climbing practice for beginning and advanced climbers and qualification tests will be held.

On Saturday, July 18, club members and guests will hike from Cowles through some of New Mexico's loveliest mountain areas.

Both trips start from Nob Hill at 7 a.m.

DRAG RACING HONORS went to Mike Truitt (8114-2) recently at the Northern Pacific Coast Dragster invitation competition at Lodi, Calif. He is shown above with his trophies and his special modified sedan which set a new record at the meet. He was clocked at 91.74 mph in 15.33 seconds from a standing start.